OLED DISPLAY MODULE

Application Notes

PRODUCT NUMBER	DD-25664BE-1A with EVK board

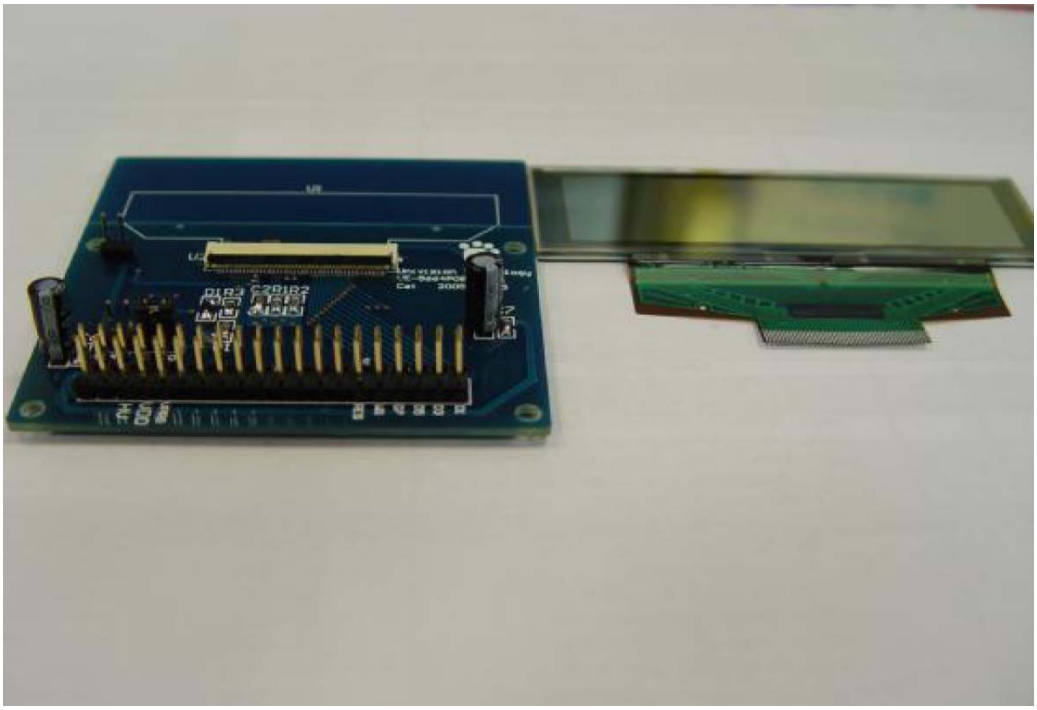

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TABLE OF CONTENTS

1 EVK SCHEMATIC 4

2 SYMBOL DEFINITION 5

3 TIMING CHARACTERISTICS 6

3.1 PARALLEL INTERFACE TIMING CHART 6

3.2 MPU 8-BIT PARALLEL INTERFACE 6

4 CONNECTION BETWEEN OLED AND EVK 8

5 HOW TO USE THE DD-25664BE-1A 10

5.1 RECOMMENDED INITIAL CODE 11

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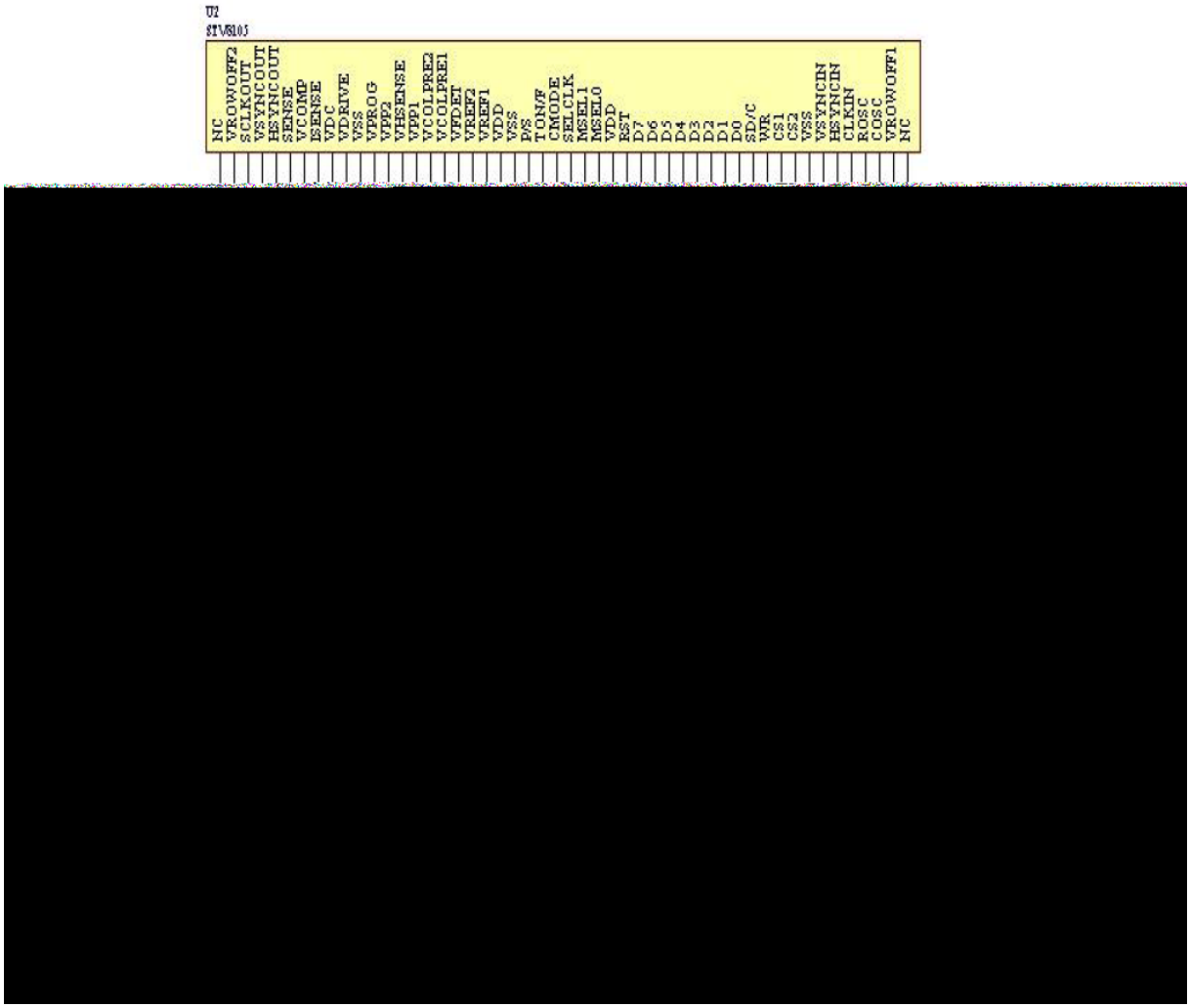
1 EVK Schematic



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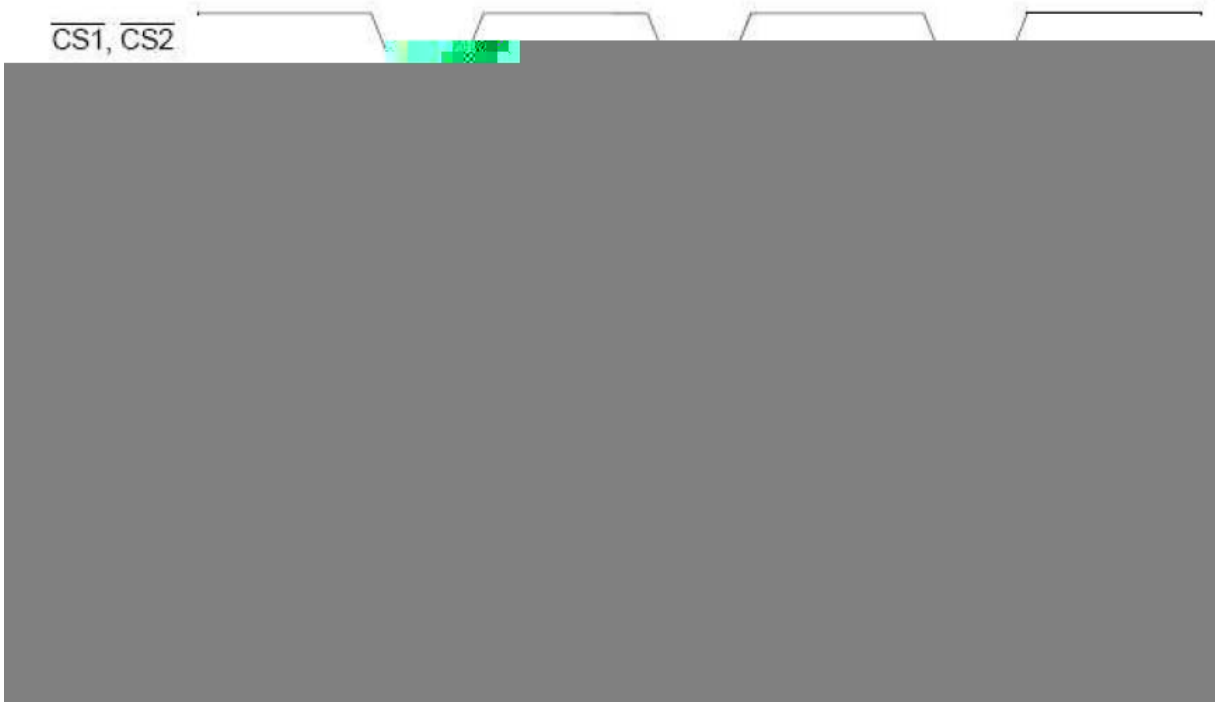
3 Timing characteristics

3.1 Parallel Interface timing chart



3.2 MPU 8-Bit Parallel Interface

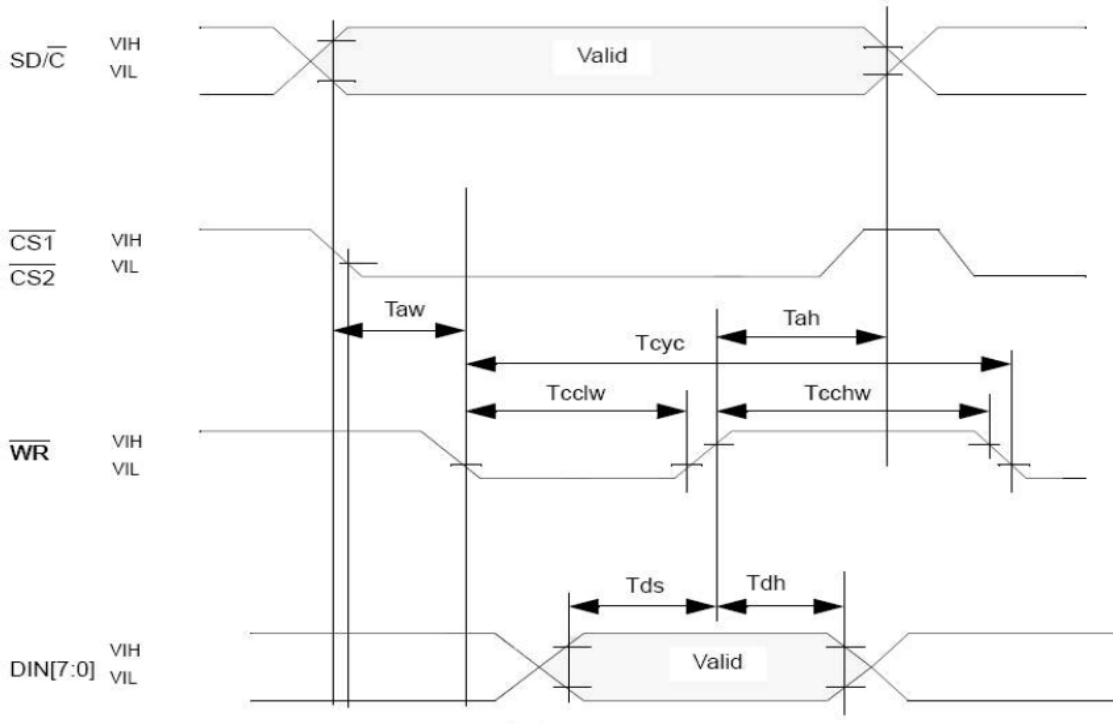


Figure 2 MPU 8-bit parallel Interface timing diagram

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Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Units
Tah	Address Hold Time	$\overline{WR}$	10			ns
Taw	Address Setup Time	$\overline{WR}$	0			ns
Tcyc	System Cycle Time	$\overline{CS1}$, $\overline{CS2}$	200			ns

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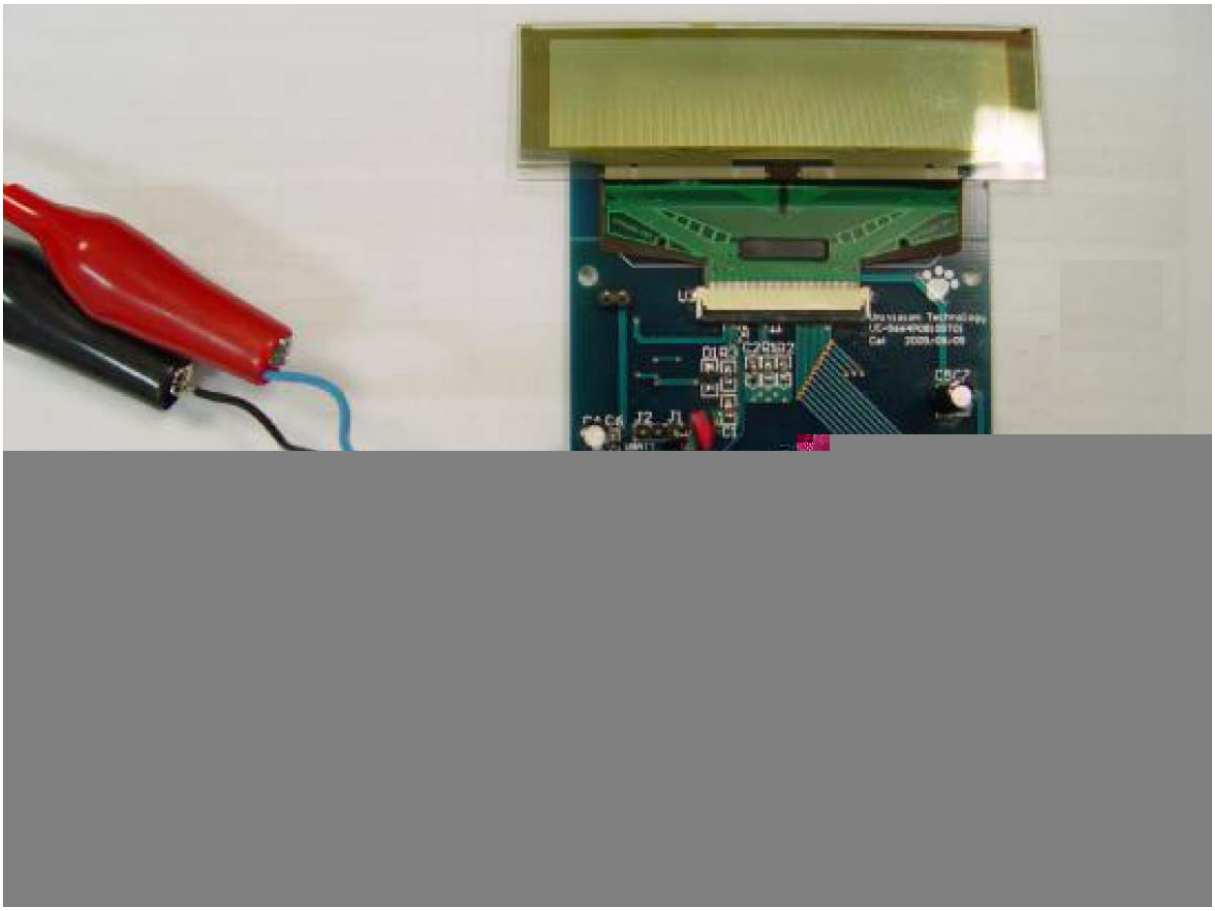

Figure 7: control MCU (not supplied) connected with EVK

Note 1：It is the external most positive voltage supply. In this sample is connected to power supply.

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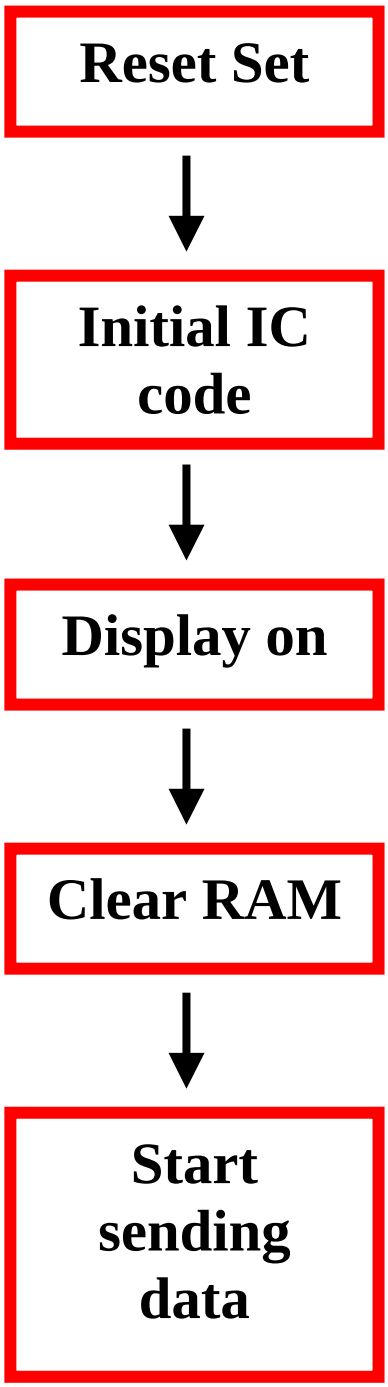
5 How to use the DD-25664BE-1A



RES#=0; Delay 10ms; RES#=1

Suggest all registers set again

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5.1 Recommended Initial code

```
Reset_ST8105(); //hardware reset
DotScanLineSet(0x3f); //set scan line=64 lines
DotDirectionSet(0x00); //dummy line=1,vertical non-invert,horizontal non-invert
DividRatioSet(0x00); //set dividing ratio =1/1
XAddressSet(Column); //set X axial range
YAddressSet(Row); //set Y axial range
GrayScaleSet(0x03); //set 16 gray scale mode, X/Y axial increment On
IniLuminanceAdjA(0x80); //Data of D/A converter from Register A
IniLuminanceAdjB(0x80); //Data of D/A converter from Register B
DC2DCControl(0x00); //turn off DC2DC converter
VFDectionAddValue(0x00);//turn off VF dectection
LuminanceSet(0x1f); //set Luminance
AnodeOutputSet(0x00); //AVM off, ALL HiZ off, LSLZ=VL, OFLZ=VL
SetupPeriod1(0x0f); //16 sclk, VL mode
SetupPeriod2(0x00); //1 sclk, VL mode
SetupPeriod3(0x00); //1 sclk, VL mode
SetupPeriod4(0x88); //9 sclk, VM mode
Odd15GrayScaleSet(0xff);//Odd1~15 and Even1~15 <-- data sheet Reset value(default)
Odd14GrayScaleSet(0xaf);
Odd13GrayScaleSet(0x79);
Odd12GrayScaleSet(0x53);
Odd11GrayScaleSet(0x39);
Odd10GrayScaleSet(0x27);
Odd9GrayScaleSet(0x1a);
Odd8GrayScaleSet(0x12);
Odd7GrayScaleSet(0x0c);
Odd6GrayScaleSet(0x08);
Odd5GrayScaleSet(0x05);
Odd4GrayScaleSet(0x03);
Odd3GrayScaleSet(0x02);
Odd2GrayScaleSet(0x01);
Odd1GrayScaleSet(0x00);
Even15GrayScaleSet(0xff);
Even14GrayScaleSet(0xaf);
Even13GrayScaleSet(0x79);
Even12GrayScaleSet(0x53);
Even11GrayScaleSet(0x39);
Even10GrayScaleSet(0x27);
Even9GrayScaleSet(0x1a);
Even8GrayScaleSet(0x12);
Even7GrayScaleSet(0x0c);
Even6GrayScaleSet(0x08);
Even5GrayScaleSet(0x05);
Even4GrayScaleSet(0x03);
Even3GrayScaleSet(0x02);
Even2GrayScaleSet(0x01);
Even1GrayScaleSet(0x00);
CathodeDriverMode(0x12); //Line 72->1, Internal cathode driver(Single scan)
RCAOutputTiming(0x3f); //RCA output timing=64CLK
RCBOutputTiming(0x3f); //RCB output timing=64CLK
DotDisplaySet(0x01); //display on
```


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